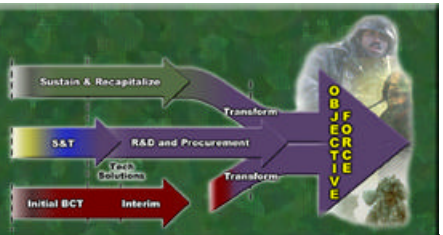

45th Annual NDIA FUZE Conference
17-18 April 2001
TACTICAL
PROGRAM
EXECUTIVE
OFFICE
PRECISION
STRIKE
MISSILES
PEO Tactical Missiles
COL Jody Maxwell, Director
System Integration & Operations



PEO TACTICAL MISSILES OVERVIEW

PROGRAM EXECUTIVE OFFICER
TACTICAL MISSILES

MISSION

Provide the American Soldier with the finest, combat effective, tactical missile systems in the world in a timely and cost-effective manner while fully supporting The Army's transformation.

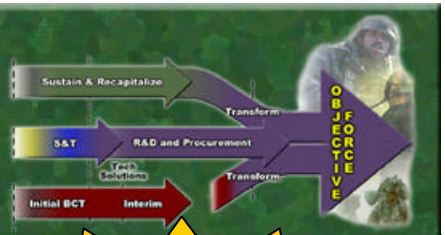
VISION

A world-class government / industry team that gives the American soldier an unparalleled, overmatch tactical missile capability that allows our Army to fight and win on the 21st century battlefield with minimal casualites in the shortest time possible.

GOALS

- Excel beyond all others in fielding the best tactical missile systems in the world.
- Effectively team with industry.
- Build the Army Acquisition Corps of the future.
- Mature & weaponize critical technologies for the Objecitve Force.
- Reduce the Life Cycle Cost & in-theater logistics footprint of our missile systems.

PEO TACTICAL MISSILES



PEO TACTICAL MISSILES

DEPUTY PEO
PRINCIPAL STAFF
EUROPEAN REP

FY00 MANPOWER REQUIREMENTS

	CORE	MATRIX
CIVILIAN	281	611
MILITARY	37	10
CONTRACTOR	76	502
TOTAL	394	1123

PM AVIATION ROCKETS & MISSILES

LONGBOW HELLFIRE ACAT IC
LASER HELLFIRE
HYDRA 70
MODERNIZED HELLFIRE
APKWS

AVIATION

PM ATACMS - BAT

ATACMS / BAT ACAT ID
BAT
BAT P3I
BLK II
ATACMS / APAM ACAT IC
BLK I

PM MLRS

M270A1 ACAT1C
IFCS ACAT III
ILMS ACAT III
ER-MLRS ACAT III
GMLRS ACAT III
HIMARS ACTD

FIRE SUPPORT

PM CCAWS

TOW FIRE & FORGET
IBAS ACAT II
ITAS
T2SS

PM JAVELIN

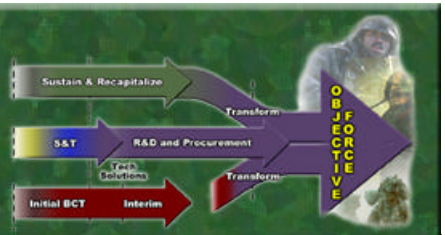
JAVELIN ACAT IC

PM KINETIC ENERGY MISSILES

LOSAT ACTD+

MANEUVER

FAMILY OF DEEP FIRES GUIDED ROCKETS AND MISSILES



NEAR-TERM (FY00 - 07)

MID-TERM (FY08 - 16)

FAR-TERM (FY17 - 25)

ROCKETS

M26
M26A2
XM30

XM30
UNITARY

FCS WEAPON SYSTEM (FUTURE ROCKET)

MISSILES

ARMY TACMS BLOCK I
ARMY TACMS BLOCK IA
ARMY TACMS BLOCK II
BAT

ARMY TACMS BLOCK II
CONTINUOUS TECHNOLOGY INSERTION
FUTURE MISSILE
BAT P3I
TACMS 2020

ATACMS BLOCK IV UNITARY

ATACMS BLOCK IV UNITARY

LAUNCHERS

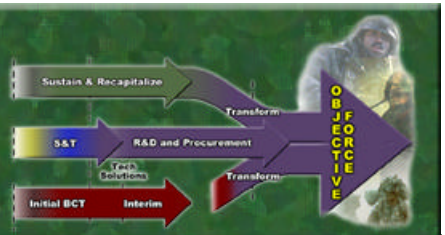
M270A1
HIMARS

M270A1
HIMARS
FCS

HIMARS
FCS

Fuzeapr17-18-01/slm

FAMILY OF MANEUVER AND AVIATION MISSILES

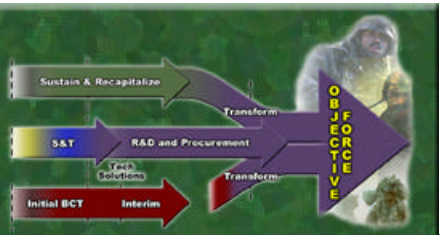


	NEAR-TERM (FY00 - 07)	MID-TERM (FY08 - 16)	FAR-TERM (FY17 - 25)
Shoulder Fired	JAVELIN	JAVELIN P3I	JAVELIN P3I / LAND WARRIOR
Ground	LOSAT; TOW 2A; TOW 2B; TOW F&F (INTERIM LIGHT FORCE SOLUTION)	CONTINUOUS TECHNOLOGY INSERTION; CKEM; COMMON CE MISSILE (Phase I)	COMMON KE MISSILE; COMMON CE MISSILE (Phase II)
Air	BASIC HELLFIRE *; INTERIM HELLFIRE; HELLFIRE II; MOD. H.F.; LONGBOW HELLFIRE; HYDRA 70	LONGBOW HELLFIRE; HYDRA 70 P^{3}I	

TECHNOLOGY INSERTION THROUGH EVOLUTIONARY ACQUISITION

* Will be executed as part of CM Program

FIELDING TO THE FORCE



FUE: LAST FOUR YEARS

JAVELIN - JUL 96

IPDS LAUNCHER - FEB 98

BLK 1A - FEB 98

HIMARS (PROTOTYPES) FEB 98

LONGBOW - JUL 98

ITAS - SEP 98

ER-MLRS MAR 99

FIELDINGS CONTINUE

NEXT TWO YEARS

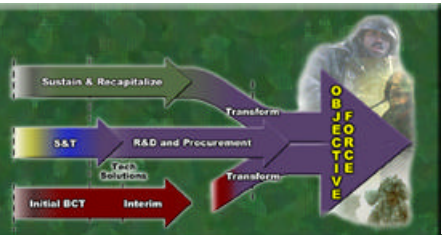
IBAS AUG 00

M270A1 UPGRADE SEP 01

ATACMS BLK II SEP 01

OPTEMPO IS INCREASING

Proposed Organization



PEO
Tactical Missiles

PM
Common Missile
- Air Integration
- Ground Integration

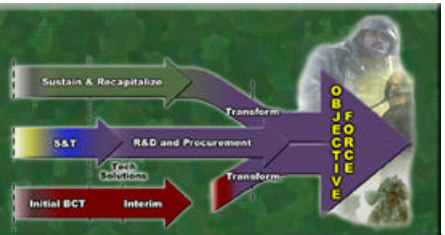
PM
Fire Support Rockets & Missiles
- GMLRS
- P3I BAT
- Future Munitions
- Unitary Munitions
- Launcher

PM
Aviation Rockets & Missiles
- Hydra 70
- Longbow

PM
Kinetic Energy Missile
- LOSAT

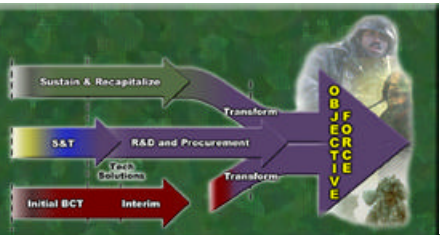
PM
Grd Maneuver Missiles
- Javelin
- Tow F&F

THE SITUATION



- **In 1991 Following Desert Storm a requirement for <1% hazardous duds left on Battlefield was established**
- **Analysis of proposals indicated SDF as the most feasible option to meet the user requirement**
- **SDF development contract issued in 1992 with planned incorporation into ER MLRS in 1998**
- **To date Tactical Missile PEO has expanded approximately $64M for development, testing of HRE, and LRIP for XM 235 SDF**

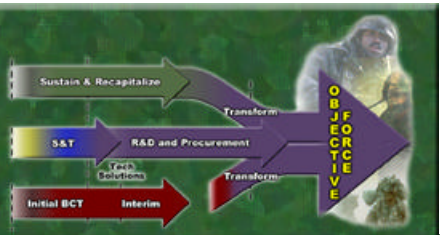
THE RESULTS



- **The Production of ER MLRS began in 1996 without a SDF**
- **FMS cases have been lost and others are jeopardized due to the lack of a SDF**
- **HRE will not meet required rate**
- **Proposed HRE recovery plan is high risk**
- **LRIP contract terminated**

Bottom Line: Over ten years and $64M invested in a solution for <1% hazardous duds with no acceptable solution in sight

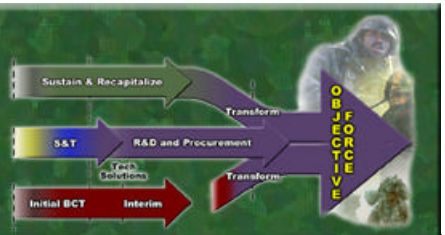
TECHNOLOGY TRENDS



- FIRE AND FORGET TECHNOLOGY
- FOCAL PLANE ARRAY (FPA)
- DUAL MODE / MULTI-MODE SEEKERS
- DEWAR DETECTOR COOLERS (DDC)
- TANDEM WARHEADS
- INERTIAL MEASUREMENT UNITS (IMU)
- GLOBAL POSITIONING SYSTEMS (GPS)
- GLOBAL POSITIONING SYSTEMS GUIDANCE PACKAGE (GGP)
- ELECTRONIC SAFE AND ARM ES&A DEVICES
- ADVANCED SIGNAL PROCESSING

- **THESE TECHNOLOGY TRENDS BRING TECHNOLOGY CHALLENGES**
- **FUZE TECHNOLOGY DEVELOPMENT MUST KEEP UP WITH ADVANCES IN TECHNOLOGY**

PATH FORWARD



- **U.S. is committed to lower UXO on the Battlefield**

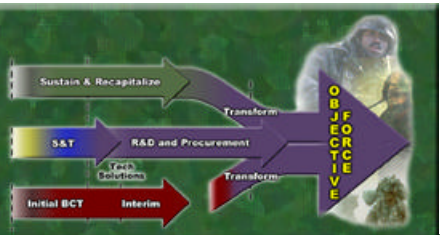
- **New DOD Policy issued 10 Jan 2001 stating a desire to field future submunitions with a 99% or higher function rate**
  - **"Future" submunition weapon is one that will reach MS II after first quarter of FY 2005**

- **It's clear we can't continue to do business as usual**

- **Consider other FUZE designs (Improved mechanical, Pyro delays)**

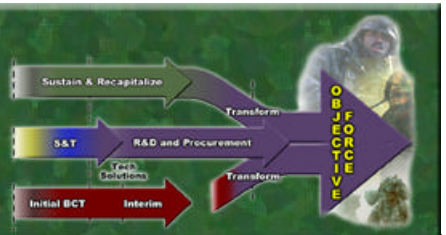
- **Most promising option is to pursue a Co-operative development of a European SDF that will transfer the qualified design to a US contractor for production**

PATH FORWARD



- **Industrial base must define common architecture**
- **Combine performance & environmental requirements for targeted programs**
- **Common module approach**
  - **Flexible hardware building blocks**
  - **Programmable for multiple applications**
- **Common Components**
  - **Configured to adapt to peculiar system interfaces**
  - **Packaged to accommodate worst case scenario**
- **Partitioned for Growth**
  - **Unique functions & interfaces segregated**

CONCLUSION



- **Concern over dirty battlefield is increasing as evidenced by 99% UXO requirements**
- **Quantities and funding for specific weapons systems are decreasing**
- **Fuze industrial base must develop designs that are transportable to other systems. Production facilities must be capable of producing more than one item at high rates**

We simply cannot afford to develop and support new unique pinpoint designs for each system